

Call Nr: 1053995

AUTHORS: Shul'zhenko, M. N., Mostovoy, A. S.  
TITLE: Course in Aircraft Design (Kurs konstruktsiy samoletov)  
PUB. DATA: Oborongiz, Moscow 1956, 528 pp., 11,500 copies  
ORIG. AGENCY: None  
EDITOR: Reviewer: Grigor'yev, V. L., Eng.; Editor:  
Burakova, O. N.; Managing Editor: Sokolov, A. I.,  
Eng.; Publ. House Editor: Poseva, G. F.; Tech. Ed.:  
Gladkikh, N. N.  
PURPOSE: The book was intended as a textbook for aviation  
tekhnikums. It may also serve as a manual for students  
of aviation schools and colleges and for members of the  
Air Force and Civil Air Fleet with a secondary technical  
education.  
COVERAGE: The book represents the first attempt to create a syste-  
Card 1/13 matic course in aircraft design. The authors do not

Course in Aircraft Design (Cont.)

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claim, however, to have covered fully this field. To follow the text, its readers must know elementary mathematics, have some notion of calculus, and some basic knowledge of mechanics, aerodynamics, and strength of materials. There are 23 references, all USSR. Contemporary designers mentioned include: Tupolev, A.N. Il'yushin, S. V.; Mikoyan, A. I.; Myasishchev, V. M.; Yakovlev, A. S.; Lavochkin, S. A.; Sukhom, P. O.; Klimov, V. Ya.; and Lyul'ka, A. M. Some of the aircraft they designed are identified.

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Part I

Fundamentals of Structural Mechanics of Aircraft

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2. Elements of statics and graphostatics in a two-dimensional system . . . . .	19

Card 2/13

FEINBERG, Iosif Nikolayevich; ROPTANOV, Fedor Ivanovich; SHUL'ZHENKO, M.H., prof., rezensent

[Science of airplanes] Samoletovedenie. Moskva, Mashinostroyeniye, 1964. 206 p. (MIRA 17:11)

SHUL'ZHENKO, Mikhail Nikitich; MOSTOVOY, Anatoliy Solomonovich;  
GRIGOR'YEV, V.I., inzh., retsenzent; SPEKHOV, A.I., inzh.,  
red.

[A course in the construction of airplanes] Kurs konstruksii  
samoletov. 2. izd., dop. i perer. Moskva, Mashinostroenie,  
1965. 562 p. (MIRA 18:6)

L 3528-66 EWT(d)/EWT(m)/EWP(w)/EPF(c)/FA/EWA(d)/EWP(j)/T-2/EWP(k)/EWP(h)/EWP(z)/  
 AM5018665 EWP(b)/EWA(h)/ETC(m)/BOOK EXPLOITATION UR/  
 EWP(t) JD/WW/EM/DJ/WE/JT/RM 629.13(075)

Shul'zhenko, Mikhail Nikitich; Mostovoy, Anatoliy Solomonovich

Course in aircraft design (Kurs konstruktsiy samoletov) 2d ed., rev. and enl.  
 Moscow, Izd-vo "Mashinostroyeniye", 1965. 562 p. illus., biblio., tables.  
 9000 copies printed.

TOPIC TAGS: aircraft design principles, aircraft subassembly, aircraft reliability estimate

PURPOSE AND COVERAGE: This monograph is a textbook to be used by students attending aviation engineering schools and may be a helpful guide to technical personnel working in the aircraft industry. The second enlarged and revised edition of a Course in Aircraft Design was written in accordance with the curriculum prescribed for aviation engineering schools. The book consists of three parts. Part I explains the principles of structural mechanics to the extent needed for an approximate calculation of the structural strength of an aircraft. Part II discusses the principles of aircraft design and contains some general information on aircraft: Aircraft components such as wings, tail, fuselage, power plants (including

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fuel and lubrication systems), controls, and landing gear are discussed in Part III. There are 116 formulas, 366, figures, 6 tables, and 22 references, all Russian.

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SUB CODE: AS

SUBMITTED: 01Mar65

NO REF SOV: 022

OTHER: 000

Card

4/4

SHUL'ZHENKO, N.F., inzh.

Is it necessary to separate engineering and working drawings  
of ships? Sudostroenie 25 no.4:42-44 Ap '59. (MIRA 12:6)  
(Naval architecture) (Mechanical drawing)

SHUL'ZHENKO, P.A., inzh.

Reserves for increasing the efficiency of electric traction. Zhel.  
dor.transp. 40 no.10:13-18 0 '58. (MIRA 11:12)  
(Electric railroads--Management)

SHUL'ZHENKO, P.A., inzh.

Train schedules and organization of the efficient use of new  
types of traction. Zhel. dor. transp. 41 no.4:20-26 Ap '59.  
(MIRA 12:6)

(Railroads--Timetables)  
(Railroads--Management)  
(Locomotives)

TIKHOMIROV, I.G., prof., doktor tekhn. nauk; TULUPOV, L.P., kand. tekhn. nauk;  
NEVZOROV, A.V., kand. tekhn. nauk; BUYANOV, V.A., inzh.; MUKHO, P.B.,  
inzh.; VINNICHENKO, A.V., inzh.; SHUL'ZHENKO, P.A., inzh.; YARMOLENKO,  
V.Ye., inzh. (Gomel')

"Organization of railroad traffic" by F.P. Kochnev and others.  
Reviewed by I.G. Tikhomirov and others. Zhel. dor. transp. 41  
no.4:93-96 Ap '59. (MIRA 12:6)

(Railroads--Traffic)  
(Kochnev, F.P.)

SHUL'ZHENKO, P. A.

Cand Tech Sci - (diss) "Study of elements of organization of train movement, on graphs, using electric traction." Gomel', 1961. 18 pp; (Ministry of Railways USSR, Belorussian Inst of Railroad Transport Engineers); 200 copies; price not given; (KL, 7-61 sup, 249)

TIKHOMIROV, I.G., prof., doktor tekhn. nauk; BUYANOV, V.A., ass.;  
VINNICHENKO, A.V., ass.; MUKHO, P.B., ass.; NEVZOROV, A.V.,  
dots.; TULUPOV, L.P., dots.; SHUL'ZHENKO, P.A., ass.;  
YARMOLENKO, V.Ye., ass.; Prinimal uchastiye PETROV, A.P.,  
prof.; VEREVKINA, N.M., red.; BELEN'KAYA, I.Ye., tekhn.  
red.

[Traffic organization in railroad transportation]Organiza-  
tsiia dvizheniia na zheleznodorozhnom transporte; konspekt  
lektsii. Pod obshchei red. I.G.Tikhomirova. Minsk, Izd-  
vo M-va vysshego, srednego spetsial'nogo i professional'-  
nogo obrazovaniia BSSR, 1961. 346 p. (MIRA 15:9)

1. Chlen-korrespondent Akademii nauk SSSR (for Petrov).  
(Railroads--Traffic)

SHUL'ZHENKO, P.A., assistant

Combined use of electric and diesel locomotives. Trudy BIIZHT  
no.9:57-69 '61. (MIRA 16:9)  
(Railroads--Management) (Locomotives)

SHUL'ZHENKO, P.A., assistant

Coefficient of speed within sections and the specific train  
stop-overs. Trudy BIIZHT no.9:77-87 '61. (MIRA 16:9)  
(Railroads—Traffic)

17(2)

SOV/177-58-9-15/51

AUTHORS: Shul'zhenko, V.M., Colonel of the Medical Corps, Candidate of Medical Sciences; Enkler, Z.K.; Kuz'mina, Yu.T., Lieutenant-Colonel of the Medical Corps; and Kogan, R.F.

TITLE: The Study of the Etiological Characteristics of Dysentery

PERIODICAL: Voenno-meditsinskiy zhurnal, 1958, Nr 9, pp 53-55 (USSR)

ABSTRACT: The article analyzes the data of the etiological structure of dysentery in soldiers, hospitalized in the years 1951/53, in the civilian population during the same years and in other soldiers. The changes in the etiological structure are given in tables. The author came to the following conclusions: 1) on the whole, the etiological characteristic of dysentery in soldiers who were treated in a hospital during 1951/53, corresponds with past data; 2) there is no epidemiological connection between soldiers and civilians who lived in the same town during 1951/53; 3) for a full epidemiological analysis of the structure of dysentery,

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SOV/177-58-11-15/50

The Diagnosis of Remote Sequela of Closed Injuries of the Cerebrum in the Practice of Experts and of Dispensaries

the diagnosis of remote sequela of closed cerebral injuries. Based on material of mass investigations (more than 5,000), the relative evaluation of the frequency of microsymptoms in persons, who sustained a closed cerebral injury in the past shows that the oculo-motor nerve is most frequently injured (70%). The author suggests a method according to which the person under investigation has to fix the eyes at a motionless subject for 8-10 seconds in order to reveal the weakness of the muscles that innervate the oculo-motor nerves. In patients who sustained closed cranial traumas, the look declines from the fixing object to one side or the other. Thus, the symptom of a "defect of the fixation of the look" permits to recognize a cranial trauma before the anamnesis has been established. One case report is given.

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SEUL'ZHENKO, V.M. (Moskva); ANTONOVA, A.A. (Moskva)

Gelatin filters for the bacteriological analysis of air. Gig. i san.  
24 no.9:85-86 S '59. (MIRA 13:1)  
(AIR FILTERS) (AIR--BACTERIOLOGY)

ALEKSANDROV, N.I.; GEFEN, N.Ye.; SHUL'ZHENKO, V.M.; ALEKSANDROV, P.M.;  
LEBEDINSKIY, V.A.; KAVERINA-FIRCANG, K.G.; KUZNETSOVA, V.I.;  
BEKKER, M.L.; VORONIN, Yu.S.

Search for effective chemical vaccines against some zoonoses.  
Report No.3: Development of a chemical plague vaccine and its  
experimental test in animals. Zhur. mikrobiol., epid. i immun.  
4 no.4:66-71 Ap '63. (MIRA 17:5)

L 5132-66 EWT(1)/FS(v)-3 DD  
ACC NR: AP5027476

SOURCE CODE: UR/0219/65/060/010/0036/0039

AUTHOR: Shul'zhenko, Ye. B.

ORG: Laboratory of General and Experimental Cardiology of the Institute of Normal and Pathological Physiology, AMN SSSR, Moscow (Laboratoriya obshchey i eksperimental'noy kardiologii Instituta normal'noy i patologicheskoy fiziologii AMN SSSR)

TITLE: Characteristics of reflex regulation of hemodynamic changes under the influence of transversely directed acceleration forces

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 60, no. 10, 1965, 36-39

TOPIC TAGS: biologic acceleration effect, animal physiology, blood circulation, cardiovascular system, dog

ABSTRACT: Experiments were conducted to clarify the mechanism of hemodynamic changes in the animal organism during acceleration. Anesthetized dogs of both sexes were subjected to chest-to-back acceleration of 9 g for 1 min, first with intact zones of reflex regulation of blood circulation, and then with denervation of the carotid sinuses. Although no quantitative determination of the minute volume of blood or the peripheral resistance could be made, a good idea of the direction of changes in these indices was obtained. Under the influence of transversely directed acceleration forces, intact anesthetized dogs showed the following hemodynamic changes: decreased

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UDC: 612.13/.18.014.47:531.113

L 5134-00

ACC NR: AP5027476

arterial pressure, increased pulse rate, decreased minute volume of blood, and increased peripheral resistance. A whole series of interconnected reflex mechanisms is involved in these changes. Thoracic and abdominal organs are squeezed during acceleration, and there is some redistribution of blood in the lungs. Cardiovascular activity in centrifuged animals showed a two-phase change: a phase of circulatory disruption followed by a compensatory phase. Hyperfunction of the heart in the second phase is apparently triggered by the disruption of blood flow to organs and tissues in the first phase. Comparative restoration of the functional state of the cardiovascular system was observed 3—7 min after the centrifuge had stopped. It is interesting that denervation of the carotid sinuses causes a delay in the compensatory phase, probably connected with later activation of the aortal reflexogenic zone. Thus, the carotid sinuses are an important link in the coordinated system of reflex regulation of blood circulation. Orig. art. has: 1 table. [JS]

SUB CODE: LS,SW/SUBM DATE: 08Jan65/ ORIG REF: 001/ OTH REF: 007/ ATD PRESS: 4/33

BC

Card 2/2

L 29238-66 EWT(1) SCTB DD

ACC NR: AP6019354

SOURCE CODE: UR/0219/65/060/012/0007/0010

AUTHOR: Shul'zhenko, Ye. B.

ORG: Laboratory of General and Experimental Cardiology (Headed by Active member of AMN SSSR, Professor V. V. Parin), Institute of Normal and Pathological Physiology (Directed by Active member of AMN SSSR, Professor V. V. Parin), AMN SSSR, Moscow (Laboratoriya obshchey i eksperimental'noy kardiologii Instituta normal'noy i patologicheskoy fiziologii AMN SSSR)

TITLE: Significance of sinocarotid reflex regulation of hemodynamic changes in the presence of transverse accelerations

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 60, no. 12, 1965, 7-10

TOPIC TAGS: dog, blood pressure, cardiovascular system, neurophysiology

ABSTRACT: The dogs of both sexes weighing 10-15 kg each, under anesthesia (morphine 0.75 mg/kg, chloralose 50 mg/kg, nembutal 10 mg/kg) were exposed to increasing accelerations (3, 6 and 9 G's) for one minute each time, with catheters introduced into the cavity of the left ventricle and aorta. Pressure was recorded by means of tensometric sensors located at the heart level and rigidly attached to the chair of the centrifuge. After removal from centrifuge, bilateral denervation of the carotid sinuses was carried out and the experiment repeated. In the presence of intact carotid sinuses, systolic and diastolic pressure and pulse rate at first oscillate on exposure to G-forces but later during the exposure more or less return to normal. These

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UDC: 612.19:611.133-018.866:612.13.014.47:531.113.11

L 29238-66

ACC NR: AP6019354

changes occur against a background of an increased frequency of cardiac contractions, enhanced vascular tonus, and slight oscillations of minute volume of the blood. In animals with denervated carotid sinuses, on the other hand, all the indicators of arterial pressure drop more sharply at the beginning of exposure to G-forces and do not return to normal until after the centrifuge is stopped. Thus, in dogs with intact sinuses the adaptive changes in the cardiac rhythm and vascular tonus are sufficient to maintain arterial pressure at the level required by the organism during exposure to overloads, whereas in dogs with denervated sinuses the organism is incapable of compensating the hemodynamic disturbances due to G-forces, because it is deprived of its carotid-zone baroreceptors, so that the vascular tonus is lowered while the increase in pulse rate and in minute volume of the blood is insufficient to compensate for these hemodynamic disturbances. Hence, changes in vascular tonus may be a leading factor in compensatory changes in the cardiovascular system; removal of the carotid sinuses is equivalent to eliminating an important link in the nervous reflex regulation of vascular tonus. This paper was presented by Active Member AMN SSSR V. V. Parin, Professor, Head of General and Experimental Cardiology Laboratory, Director of Institute of Normal and Pathological Physiology on 31 April 1965. Orig. art. has: 2 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: 31Apr65 / ORIG REF: 001 / OTH REF: 005

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L 31757-65

ACCESSION NR: AR5005728

8/0313/64/000/010/0002/0002

SOURCE: Ref. zh. Issl. kosm. prostr. Otd. vyp., Abs. 10.62.13

AUTHORS: Shul'zhevich, V. A.

TITLE: Outstanding scientist and patriot. On the 85th birthday of N. A. Rynin

CITED SOURCE: Sb. tr. Lenigr. in-t inzh. zh.-d. transp., vyp 213, 1963, 3-6

TOPIC TAGS: missile industry, history

TRANSLATION: The important services rendered by N. A. Rynin in the development of interplanetary travel and rocket technology are noted. He was the first to formulate and solve the problem of studying the influence of inertial overloads on the human organism during flight. In 1932 he published one of his major works -- "Meshplanetnyye soobshcheniya" (Interplanetary Communications). The work of N. A. Rynin has contributed to a considerable degree to the tremendous progress of science and technology of our days. Yu. S.

SUB CODE: GO,SV

ENCL: 00

Card 1/1

SHUL'ZHITSKIY, V.

Trench silos lined with boulders set in clay mortar. Sel' stroi.

13 no.8:6-7 Ag '58.

(MIRA 11:9)

(Silos)

AUTHOR: SAULISBERG, S. A. and Iyganov, V. V., Kazgiprotsvetmet  
organisation.

TITLE: Semi-industrial installation for smelting copper concentrates  
in a cyclonic furnace. (Polupromyshlennaya ustanovka dlya  
plavki mednykh kontsentratov v tsiklonnoy pechi.)

PERIODICAL: "Tsvetnye Metally" (Non-ferrous Metals),  
1957, No. 1, pp. 42 - 45, (U.S.S.R.)

ABSTRACT: In this article, a description is given of the semi-  
industrial scale cyclone furnace for copper smelting designed  
by Kazgiprotsvetmet Organisation for the Balkhashsk Copper  
Smelting Works. The basis for the design was experimental  
work of the Energetics Institute of the Academy of Sciences  
of the Kazakhstan S.S.R. The cyclone proposed has a diameter  
of 1 000 mm and a height of 1 750 mm and is lined with chrome-  
magnesite brick. The cyclone is to be enclosed in a water  
jacket. It is expected that the installation will be able to  
smelt about 100 tons of charge per day.

A brief description is also given of a cyclonic installation  
designed by the organisation for semi-industrial tests on the  
sublimation and smelting of the poly-metallic ores of the  
Altai region, intermediate products and similar materials.  
This differs from the previously discussed cyclonic install-  
ation only in the gas-removal system.

An editorial note to this article points out that important  
details are lacking from the design information provided. The  
note also mentions that comparative tests carried out by the  
Giprotsvetmet organisation have shown that fluidised roasting

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Semi-industrial installation for smelting copper concentrates  
in a cyclonic furnace. (Cont.)

in oxygen is superior to cyclonic processes for copper  
sulphide concentrates, and that semi-industrial experimental  
installations for the fluidised process should also be  
constructed.

There are 2 figures and 2 Russian references.

SHUL'ZINGER, S.M.

Using three-dimensional models in design. Prom.stroi. no.10:  
22-23 '62. (MIRA 15:12)

1. KazgiproNIIkhimmash.  
(Industrial plants--Models)

SHUL'ZINGER, S.M.

Green light to three-dimensional planning. Mashinostroitel'  
no.10:35-36 0 '63. (MIRA 16:12)

1. Direktor instituta Kazgiproniikhimmash.

16.3500

30839

S/044/61/000/008/008/039  
C111/C333

AUTHOR:

Shum, A. *J*

TITLE:

P-separation and incomplete separation of the variables  
in the equation  $\Delta_2 v = 0$  in spaces of constant curvature

PERIODICAL:

Referativnyy zhurnal, Matematika, no. 8, 1961, 77,  
abstract 8A465. ("Nauchn. dokl. vyssh. shkoly. Fiz.-  
matem. n." 1958, no. 5, 57-60

TEXT:

In the space with the line element

$$ds^2 = H_1^2 d\vartheta_1^2 + H_2^2 d\vartheta_2^2 + H_3^2 d\vartheta_3^2$$

the author considers the generalized Laplace equation  $\Delta_2 v = 0$ , i.e.  
the equation

$$\frac{\partial}{\partial \vartheta_1} \left( \frac{H_2 H_3}{H_1} \frac{\partial v}{\partial \vartheta_1} \right) + \frac{\partial}{\partial \vartheta_2} \left( \frac{H_1 H_3}{H_2} \frac{\partial v}{\partial \vartheta_2} \right) + \frac{\partial}{\partial \vartheta_3} \left( \frac{H_1 H_2}{H_3} \frac{\partial v}{\partial \vartheta_3} \right) = 0. \quad (1)$$

In the space of constant curvature  $k \leq 0$  the author seeks: 1.) all the  
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P-separation and incomplete separation...C111/C333

coordinate systems in which (1) admits a P-separation of the variables, i. e. in which the solution has the form

$$v = P(\xi_1, \xi_2, \xi_3) f_1(\xi_1) f_2(\xi_2) f_3(\xi_3),$$

where P is a completely determined function and each of the functions  $\frac{f'_i}{f_i}$  ( $i = 1, 2, 3$ ) contains at least two independent parameters; 2.) all the coordinate systems in which (1) admits an incomplete separation of variables, i. e. where its solution has the form

$$v = f_1(\xi_1) S(\xi_2, \xi_3),$$

where every function

$$\frac{f'_1}{f_1}, \quad \frac{d \ln S}{d \xi_2}, \quad \frac{d \ln S}{d \xi_3}$$

contains at least two independent parameters. It is proved that in spaces of constant curvature  $k \neq 0$  the equation (1) admits a P-separation of the variables only in those coordinate systems in which a

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P-separation and incomplete separation...C111/C333

complete separation is possible. In order that (1) admits an incomplete separation of variables

$$(v = f_1 S_{23}, S_{23} \neq f_2 \cdot f_3),$$

it is necessary and sufficient that the surfaces  $\xi_1 = \text{const}$  form either a cluster of plane surfaces with common axis ( $k \geq 0$ ) or a family of plane surfaces with common perpendicular line ( $k < 0$ ) or a family of concentric spheres ( $k \geq 0$ ) or a family of equidistant surfaces with common base plane ( $k < 0$ ) or a family of coaxial boundary surfaces ( $k < 0$ ), and that the surfaces  $\xi_1 = \text{const}$  are orthogonal to the surfaces  $\xi_2 = \text{const}$  and  $\xi_3 = \text{const}$ .

[Abstracter's note: Complete translation.]

Card 3/3

SHRE, A. I., Cand Phys-Math Sci — (disc) "Problems of <sup>separation</sup> ~~division~~  
of variables for the generalized Laplace <sup>ce</sup> equation in <sup>spaces of</sup> constant ~~curvature~~  
curvature." Mos, 1959. 6 pp including cover (1st Order of  
Lenin and Order of Labor Red Banner State U in M.V. Lomonosov),  
150 copies (M, 29-59, 125)

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SHUM, A.I., assistant

Partial P-separation of variables in the generalized Laplace's  
equation in spaces with constant curvature. Trudy MIMESKH 4 no.1:  
147-158 '59. (MIRA 13:10)

(Harmonic functions)

16(1)

AUTHOR:

Shum, A.I. (Moscow)

SOV/39-47-4-4/4

TITLE:

The Question of Separation of the Variables in the Equation  $\Delta_2 v = 0$  in Spaces of Constant Curvature (Voprosy razdeleniya peremennykh v uravnenii  $\Delta_2 v = 0$  v prostranstvakh postoyannoy krivizny)

PERIODICAL: Matematicheskiy sbornik, 1959, Vol 47, Nr 4, pp 495-512 (USSR)

ABSTRACT:

In the space with

$$ds^2 = \sum_{i,j=1}^3 g_{ij} d\varphi_i d\varphi_j \quad \text{the generalized}$$

Laplace equation

$$(1) \quad \Delta_2 v = 0$$

is considered, where it is

$$\Delta_2 v = \frac{1}{\sqrt{g}} \sum_{i,j=1}^3 \frac{\partial}{\partial \varphi_i} \left( \sqrt{g} g^{ij} \frac{\partial v}{\partial \varphi_j} \right)$$

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Definition : (1) admits an incomplete separation of the

The Question of Separation of the Variables in the  
Equation  $\Delta_2 v = 0$  in Spaces of Constant Curvature

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variables, if it possesses a solution  $v = f_1(\xi_1) \cdot 3(\xi_2, \xi_3)$ ,

whereby each of the functions  $\frac{f_1'}{f_1}$ ,  $\frac{\partial \ln S}{\partial \xi_2}$ ,  $\frac{\partial \ln S}{\partial \xi_3}$  possesses

at least two independent parameters. Fundamental theorem :  
In order that (1) admits an incomplete separation of the  
variables it is necessary and sufficient that 1.) the surfaces  
 $\xi_1 = \text{const}$  are either a bundle of plane surfaces with common  
axis ( $K \geq 0$ ) or parallel planes ( $K \leq 0$ ) or planes with a common  
normal ( $K < 0$ ) or concentric spheres ( $K \geq 0$ ) or equidistant sur-  
faces with common base plane ( $K < 0$ ) or coaxial boundary surfaces  
( $K < 0$ ) and 2.) the surfaces  $\xi_1 = \text{const}$  are orthogonal to the  
surfaces  $\xi_2 = \text{const}$ ,  $\xi_3 = \text{const}$ . Theorem : In spaces of constant  
curvature  $K \neq 0$  there exists no coordinate system in which a  
P-separation in the sense of Darboux is possible and a complete

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The Question of Separation of the Variables in the  
Equation  $\Delta_2 v = 0$  in Spaces of Constant Curvature

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separation ( $P \equiv 1$ ) is impossible. The author mentions V.V. Stepanov, V.A. Steklov, A.A. Fridman, M.N. Olevskiy. There are 12 references, 4 of which are Soviet, 5 American, and 3 French.

SUBMITTED: July 31, 1957

Card 3/3

USCOMM-DG-60,930

SIGNATURE, P.K.; SHAW, A.J.

Translating and pressing: Tedy Kai. Conf. inst. no.13: 98-401  
163. (T.R. 1:14)

SIDEL'KOVSKIY, M.P.; SHUM, B.M.; FRADIN, M.D.; TSILEVICH, I.Z.;  
BUL'SKIY, M.T.; YASHCHENKO, V.A.; KARPOV, G.D.

[Improvement of rolling-mill technology on the basis of  
advanced experience] Usovershenstvovanie tekhnologii v  
prokatnykh tsekhakh na baze peredovogo opyta, Moskva, Gos.  
nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallur-  
gii, 1953. 306 p. (MLRA 7:3)  
(Rolling mills)

SHUM, B. M.

✓ Use of Manipulators on the Back Side of a Blooming Mill.  
B. M. Shum. (Slat, 1955, (3), 243-246). ~~The advantages~~  
Data are presented showing the advantages of manipulation  
on the back as well as the front side of a blooming mill. *ms*

The application of manipulation for various operations is  
considered and the design of manipulators is touched on.

*of*

SHUM, Boris Maksimovich; VASIL'YEV, Ye.P., redaktor; LANOVSKAYA, M.P.,  
redaktor izdatel'stva; PETROVA, N.S., tekhnicheskii redaktor

[The fittings of rail and structural steel, large shape mills]  
Armatura rel'sobalochnykh i krupnosortnykh stanov. Moskva, Gos.  
nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii,  
1956. 218 p. (MLRA 9:10)  
(Rolling mills)

SHUM, B.M.

Rolling of economical SVF17 shapes for use as mine supports. Stal'  
22 no.3:243-246 Mr '62. (MIRA 15:3)

1. Zavod "Azovstal".  
(Rolling (Metalwork))

SHUM, L. F.

21 21  
 Temperature dependence of the magnetic susceptibility of alloys of the lead-tin system. E. S. Rozovik and L. F. Shum. *Uchenye Zapiski Khar'kov Univ.* 49, *Trudy Fiz. Otdel. Fiz.-Mat. Fak.* 4, 151-4 (1953); *Referat. Zhur., Fiz.* 1955, Abstr. No. 24979. — The magnetic susceptibility,  $\mu$ , of Sn, Fe, and 62; 80, and 90% b. wt. Pb were used and the measurements were made for the temp. range 20–300°. At room temp.  $\mu_{\text{Sn}} = +0.031 \times 10^{-4}$  and  $\mu_{\text{Pb}} = 0.109 \times 10^{-4}$ . Values of  $\mu_{\text{Sn}}$  were const. over the entire range of temp. A continuous increase in  $\mu$  was observed for all of the alloys up to their eutectic temp. Below this temp. the values of  $\mu$  decreases sharply. For alloys whose Pb content is greater than the eutectic compn. a min. was observed on the  $\mu$ -temp. curve in the 2-phase region. The form of these curves was explained qualitatively on the basis of the additivity rule for  $\mu$  of the liquid and solid phase. The relation of  $\mu$  to the concn. is not linear. J. Rovtar Leach

istr: 4E4j/4E2c/4E3d/  
 4E3c/4E4c

1/1

7  
 5

*Shum*

SHEIN, L.F.

Propagation of electromagnetic waves along composite lines.  
Vestsi AN BSSR. Ser. fiz.-tekh. nav. no.4:16-22 '64.  
(MIRA 18:3)

REF ID: A6024552

ACC NR: A6024552

SOURCE CODE: UR/0428/66/000/001/0036/0045

AUTHOR: Shum, L. F.

ORG: none

TITLE: On one method of solving a telegraph equation with discontinuous coefficients

SOURCE: AN BSSR. Vestsi. Seryya fizika-matematychnykh navuk, no. 1, 1966, 36-45

TOPIC TAGS: boundary value problem, electromagnetic wave, transmission line, Kirchhoff network law, Laplace transform, Green function, integral equation

ABSTRACT: The following system of telegraph equations with discontinuous coefficients is examined:

$$-\frac{\partial u_j}{\partial x} = R_j i_j + L_j \frac{\partial i_j}{\partial t} + h_{j1}(x, t),$$

$$-\frac{\partial i_j}{\partial x} = G_j u_j + C_j \frac{\partial u_j}{\partial t} + h_{j2}(x, t),$$

$$x \in S_j, S_j = (x_{j-1}, x_j), j = 1, 2, \dots, n, a = x_0 < x_1 < \dots < x_n = b, t > 0,$$

where  $u_j(x, t)$ ,  $i_j(x, t)$  are unknown functions expressing the voltage and current in  $S_j$ ;  $R_j$ ,  $L_j$ ,  $G_j$ ,  $C_j$  are nonnegative constant parameters in  $S_j$ ; and  $h_{j1}(x, t)$ ,  $h_{j2}(x, t)$

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ACC NR: AP6024332

0

are given functions characterizing the external electromagnetic effects. The initial conditions are

$$u_j(x, 0) = \varphi_j(x), \quad i_j(x, 0) = \psi_j(x), \quad x \in S_j,$$

and the boundary conditions are

$$D_1 \left( \frac{\partial}{\partial t} \right) u_1(a, t) + D_2 \left( \frac{\partial}{\partial t} \right) i_1(a, t) = D_0 \left( \frac{\partial}{\partial t} \right) u_0(t),$$

$$D_3 \left( \frac{\partial}{\partial t} \right) u_n(b, t) - D_4 \left( \frac{\partial}{\partial t} \right) i_n(b, t) = 0,$$

$$D_v \left( \frac{\partial}{\partial t} \right) = \sum_{k=0}^{n_v} d_{vk} \frac{\partial^k}{\partial t^k}, \quad v = 0, 1, 2, 3, 4,$$

where  $d_{vk}$  are constant parameters characterizing the transceiver devices. The problem

$$L_{jx}(\bar{u}_j) \equiv \frac{d^2 \bar{u}_j}{dx^2} - \gamma_j^2 \bar{u}_j = -\bar{\Phi}_j(x, p) \quad (j = 1, 2, \dots, n),$$

$$\bar{u}_j - \bar{u}_{j+1}|_{x=x_j} = 0, \quad \mu_{j+1} \frac{d\bar{u}_j}{dx} - \mu_j \frac{d\bar{u}_{j+1}}{dx} \Big|_{x=x_j} = \bar{F}_j(p) \quad (j = 1, 2, \dots, n-1),$$

$$l_{1x}(\bar{u}_1) \equiv \alpha_0 \bar{u}_1 + \beta_0 \frac{d\bar{u}_1}{dx} \Big|_{x=a} = \bar{F}_0(p), \quad l_{nx}(\bar{u}_n) \equiv \alpha_n \bar{u}_n + \beta_n \frac{d\bar{u}_n}{dx} \Big|_{x=b} = \bar{F}_n(p).$$

is solved for a line of finite length, by finding the Green function  $\bar{G}(x, \xi, p)$ .

Card 2/3

1. 00001-07

ACC NR: APG024332

A similar problem is solved for an infinite line. Representation of the contour integrals in the case of  $n = 2$  in terms of special functions is examined. Orig. art. has: 4 formulas and 1 diagram.

SUB CODE: 12/<sup>17</sup> SUBM DATE: 26Jul65/ ORIG REF: 012/ OTH REF: 003

Card 3/3

AUTHOR: Shum, S. SOV/68-58-12-15/25  
(Na Gubakhinskom  
TITLE: At the Gubakha Coking Works koksokhimicheskome zavode)  
PERIODICAL: Koks i Khimiya, 1958, Nr 12, p 50 (USSR)  
ABSTRACT: A plant for the rectification of naphthalene to produce  
a product suitable for the production of phthalic  
anhydride was built.

Card 1/1

SHUM, V.B.; SATSKIY, V.A.

Characteristics of rolling on a continuous wire rod mill. Met. 1  
gornorud. prom. no.5:65-67 S-0 '64. (MIRA 18:7)

SATSKIY, V.A.; SHUM, V.G. inzh.-kalibrovshchik

Improving the grooving of rolls of a continuous light-  
section mill. Metallurg 10 no.1:25-27 Ja '66.

(MIRA 18:1)

1. Krivorozhskiy metallurgicheskiy zavod.

SHUPIK, P.; LAVRIK, S.; SHUMADA, I.; LESHCHENKO, P.; MEDYANIK, R.; RADCHENKO, P.;  
PANCHENKO, V.; YESINENKO, L.; CHEBOTAREV, D.; BRATUS', V.; ISHCHENKO, I.;  
KOMISSARENKO, I.; KOLOMIYCHENKO, I.; MAKARCHENKO, A.; ARUTYUNOV, A.;  
SKRIPNICHENKO, D.; RODZAYEVSKIY, A.; PAVLENKO, K.; LEONENKO, K.;  
KOZYRENKO, N.; PARKHOMENKO, V.; CHENEN'KO, M.

Aleksandr Kirillovich Gorchakov; obituary. Vrach. delo no.8:144-145  
Ag '60. (MIRA 13:9)

(GORCHAKOV, ALEKSANDR KIRILLOVICH, 1900-1960)

"111, 1. I.: "Surgical treatment of patients with old traumatic air  
corruption." Kiev Order of Labor Red Banner Medical Institute Aca-  
demic A. I. Bogomolets. Kiev, 1956. (Dissertation for the  
Degree of Candidate in Medical Sciences)

Source: Kyivskaya lekars'ka No. 28 1956 Moscow

PRILIPKO, T.I., kand.med.nauk; SHUMADA, I.V., kand.med.nauk (Kiyev)

Nikolai Ivanovich Pirogov. Vrach.delo no.12:1321-1324 D '56.

(MIRA 12:10)

(PIROGOV, NIKOLAI IVANOVICH, 1810-1881)

SHUMADA, I.V., kandidat meditsinskikh nauk (Kiyev, ul. Tolstogo, d. 1, kv.16)

Surgical treatment of patients with an inveterate dislocation of the femur caused by injury. Nov.khir.arkh. no.2:41-44 Mr-Ap '57.

(MLRA 10:8)

1. Klinika ortopedii i travmatologii dlya vzroslykh (zav. - prof. A.G.Yelet'skiy) Ukrainskogo nauchno-issledovatel'skogo instituta ortopedii i travmatologii

(FEMUR--SURGERY)

SHUMADA, I.V.

Activities of medical societies in the Ukrainian S.S.R. Vrach.  
delo no.10:1113 O '57. (MIRA 10:12)  
(UKRAINE--MEDICAL SOCIETIES)

SHUMADA, Ivan Vladimirovich, kand.med.nauk; BRODSKIY, A.F., red.;  
POTOTSKAYA, L.A., tekhn.red.

[Traumatic hip dislocations and their treatment] Traymati-  
cheskie vyvikh bedra i ikh lechenie. Kiev, Gos.med.izd-vo  
USSR, 1959. 92 p. (MIRA 13:1)  
(HIP JOINT--DISLOCATION)

AKIMOV, V.I.; ALEKSEYENKO, I.P.; ALENT'YEVA, K.A.; AMOSOV, N.M.; ARUTYUNOV, A.I.;  
BRA'US', V.D.; VASHCHENKO, I.D.; GELLERMAN, D.S.; GRISHIN, M.A.;  
DANKEYEVA, T.H.; DENISOVA, A.G.; DOLGOVA, M.P.; IVANOV, H.A.; ISHCHENKO,  
I.N.; KATS, V.A.; KOLOMIYCHENKO, M.I.; LAVRIK, S.S.; LIMAREV, A.A.;  
NAZAROVA, H.G.; NOVACHENKO, N.P.; PETRUNYA, S.P.; PKHAKADZE, A.L.;  
RUDENKO, P.A.; SERGIYEVSKIY, V.F.; TAYTSLIN, I.S.; TARTAKOVSKIY, B.S.;  
CHIZHONOK, P.I.; SHALABALA, M.P.; ~~SHUMADA~~, I.V.; SHUPIK, P.L.

Konstantin Konstantinovich Skvortsov; obituary. Nov.khir.arkh.  
no.3:142-143 My-Je '59. (MIRA 12:10)  
(SKVORTSOV, KONSTANTIN KONSTANTINOVICH, 1871-1959)

SHUMADA, I.V.

Care for the health of the Soviet people is at the center of attention of the Communist Party of the Soviet Government. Nov. khir. arkh. no.1: 3-6 Ja-F '60. (MIRA 15:2)

1. Zamestitel' ministra zdavookhraneniya Ukrainskoy SSR.  
(PUBLIC HEALTH)

SHUMADA, I.V.

Concern of the Communist Party for the health of the Soviet people  
Vrach. delo no.9:4-9 S '61. (MIRA 14:12)

1. Zamestitel' ministra zdravookhraneniya USSR.  
(PUBLIC HEALTH)

SHUMADA, I.V.

State and prospects of nurses' training in the Ukrainian S.S.R.  
Med. sestra 20 no.7:7-11 JI '61. (MIRA 14:10)

1. Zamestitel' ministra zdravookhraneniya ~~USSR~~, Kiyev.  
(UKRAINE--NURSES AND NURSING--STUDY AND TEACHING)

SHUMADA, I.V. (Kiyev)

Certification of physicians in the Ukrainian S.S.R. Sov. zdrav. 21  
no.6:37-41 '62. (MIRA 15:5)

(UKRAINE--PHYSICIANS)

SHUMADA, I.V.

Present status and means of improving the training of sub-  
professional medical personnel in the Ukrainian SSR.  
Vrach. delo no.9:3-8 S.63. (MIRA 16:10)

1. Zam. ministra zdavookhraneniya UkrSSR.  
(UKRAINE—MEDICINE—STUDY AND TEACHING)

ROZHINSKIY, Mark Mikhaylovich; MEZHENINA, Yelizaveta Petrovna;  
SHUMADA, I.V., red.

[Restoration of the vital functions of the body in severe  
traumas] Vosstanovlenie zhiznennykh funktsii organizma  
pri tiazhelykh travmakh. Kiev, Zdorov'ia, 1965. 138 p.  
(MIRA 19:1)

SHUMADA, N., mladshiy nauchnyy sotrudnik

Glorious sons of Bulgaria. Nauka i zhyttia 11 no.3:56 Mr '62.  
(MIRA 15:8)

1. Institut iskusstvovedeniya, fol'klora i etnografii AN UkrSSR.  
(Miladinov, Dimitur, 1810-1862)  
(Miladinov, Konstantin, 1832-1862)

ANTONOV, Ivan Aleksandrovich; BEREZINA, Mariya Nikitichna;  
SIROTYUK, A.K., retsenzent; KULIKOVA, T.I., retsenzent;  
SHUMAGINA, V.I., red.

[Technology of the manufacture of men's coats] Tekhnologiya  
izgotovleniia muzhskikh pal'to. Moskva, Legkaia industriia,  
1965. 203 p. (MIRA 18:9)

ACCESSION NR: AT3008542

S/2984/63/000/000/0080/0091

AUTHORS: Goreva, G. I.; Sabinin, Yu. A.; Nikolayev, P. V.; Shumakher, A. N.

TITLE: Automatic compensation of curvature in stellar telescopes

SOURCE: Novaya tekhnika v astronomii; materialy\* soveshch. Komissii priborostroyen. pri Astronom. soвете AN SSSR, Moskva, 18-20 aprelya 1961 g. Moscow, Izd-vo AN SSSR, 1963, 80-91

TOPIC TAGS: Cassegrain telescope, photoelectric following system, AP 250 Cassegrain telescope, automatic control equipment, BTM 4 transformer, ETSh 2.6 meter telescope

ABSTRACT: The problem of building apparatus to compensate for deformation (bending) of the telescope tube has arisen in recent years because of construction of large, extensively automatic, astronomical instruments. Since all telescopes, besides having a meridian circle and a transit, are built on an equatorial mounting, compensation of directional error because of bending must be made by proper correction of both the declination axis and the hour axis. From geometrical considerations, the authors have found expressions to determine what the corrections for zenith and hour angles must be. The corrections are then made automatically by

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ACCESSION NR: AT3008542

means of a photoelectric following system. The system was developed at the Institut elektromekhaniki (Institute of Electromechanics) and was tested on a model telescope having a tube of reduced rigidity. The model was designed, built, and mounted jointly with personnel of the Glavnaya astronomicheskaya observatoriya (Main Astronomical Observatory). It was based on the azimuthal telescope system of the Cassegrain AP-250. The extensive modifications are described, and details are given on the optical system and, particularly, on the photoelectric following system. The authors conclude that the device works satisfactorily. Deficiencies appear to be due to imprecise adjustments or alignments. A similar photoelectric following system was also used for automatic compensation on the ETSh-2.6 meter telescope at the Krymskaya astrofizicheskaya observatoriya (Crimean Astrophysical Observatory), also with good results. The authors note that the amplifying part of the following system may be effected with semiconductors and magnetic amplifiers, and that the photoreceiver may consist of photoresistances or electronic amplifiers with a fewer number of cascades, if the light flux is sufficiently large. Orig. art. has: 10 figures and 10 formulas.

ASSOCIATION: Institut elektromekhaniki GK SM SSSR po avtomatiz. i mashinostr.  
(Institute of Electromechanics GK SM SSSR for Automation and Machine Design)

Card 2/3

SHUMAKHER, A.V., inzhener.

Changing the insulation of railroad bridges without interruption  
to train movement. Zhel.dor.transp. 37 no.10:79-80 0'55(MLRA 9:1)

(Railroad bridges--Maintenance and repair)

SHUMAKHER, A.V., inzh.

Using movable supports in the construction of precast reinforced  
concrete bridges. Transp. stroi. 8 no. 7:11-13 J1 '58. (MIRA 11:7)  
(Bridges, Concrete)

ACCESSION NR: AT3008538

S/2984/63/000/000/0023/0027

AUTHORS: Belyayev, Yu. A.; Gerasimova, T. S.; Dravskikh, Z. V.; Mikhel'son, N. N.; Sumin, V. S.; Shkutova, N. A.; Shumakher, A. V.

TITLE: Control system for the RM-700 telescope

SOURCE: Novaya tekhnika v astronomii; materialy\* soveshch. Komissii priborostroyen. pri Astronom. sovete AN SSSR, Moskva, 18-20 apr. 1961 g. Moscow, Izd-vo AN SSSR, 1963, 23-27

TOPIC TAGS: control system, automatic control, RM 700 telescope, telescope, ETsUM digital control machine

ABSTRACT: A 700-mm reflector telescope (called the RM-700) has just been built at the Pulkovskaya observatoriya (Pulkovo Observatory). It will be equipped with a double control system. One aspect is a semiautomatic control from a key or with one of two panels operating by semiautomatic control. The position of the telescope will be computed on this panel, each coordinate having a double-metering selsyn connection operating as an indicator. The hour mechanism will be a synchronous motor, supplied by a quartz-crystal clock. The second part of the system is

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ACCESSION NR: AT3008538

automatic control by means of a digital electronic control device (ETsUM). This device has been described by Yu. A. Belyayev (1961, Izv. GAO AN SSSR, 169). It operates with a binary code of sidereal time, computed in angular scale from the panel. This involves the use of a quartz-crystal clock running on sidereal time, a frequency divider and power amplifier, a frequency converter, and a cumulative adder. The operation of the parts is described in considerable detail. "B. N. Batanov (deceased), Yu. N. Gell', and A. V. Korolev participated in this work." Orig. art. has: 7 figures.

ASSOCIATION: Glavnaya astronomicheskaya observatoriya AN SSSR (Main Astronomical Observatory AN SSSR)

SUBMITTED: 00

DATE ACQ: 16Oct63

ENCL: 00

SU CODE: AA, IE

NO REF SOV: 004

OTHER: 000

Card 2/2

ZAVGORODNIY, S.V.; FEDOSEYFVA, T.G.; ~~SHUMAKHER, A.Ya.~~

Boron fluoride as a catalyst in organic chemistry. Part 14:  
Alkylation of toluene and ethylbenzene by pseudobutylene.

Trudy VGU 57:107-116 '59. (MIRA 13:5)  
(Butane) (Toluene) (Benzene)

SHUMAKHER, L., inzh.

Make wider use of local building materials. Zhil. stroi. no.5:14  
'62. (MIRA 15:6)

(Building materials industry)

POPOV, F., inzh.; ZHUKOV, S.; ZUBAREV, A., prepodavatel';  
SHUMAKHER, L.

Readers' letters. Sel'. stroi no.9:29 S '62. (MIRA 15:10)

1. Buyskiy sel'skokhozyaystvennyy tekhnikum (for Zubarev).
2. Glavnyy inzh. masterskoy No. 4 Gosudarstvennogo instituta  
proyektirovaniya sel'skogo stroitel'stva (for Shumakher).

(Construction industry)



SUSLOV, L., inzh.; SPILOV, N., inzh.; SHUMAKH R, L.<sup>I</sup>, inzh.

Rural construction requires precast elements. Zbil. stroi.  
no.10: 28-29 0 '61. (ITEM 14:10)  
(Precast concrete construction)

SHUMAKHER, L.I., inzh.

Gypsum and gypsum concrete details for the capital repair of houses.  
Gor. khoz. Mosk. 35 no.8:41 Ag '61. (MIRA 14:8)  
(Apartment houses--Maintenance and repair)

SHUMAKHER, R.E.

Work on setting up prophylactic examinations for women in the rural area. Zdrav. Ros. Feder. 5 no.10:31-33 0 '61. (MIRA 14:10)

1. Glavnyy vrach Ust'-Kulomskogo rayona Komi ASSR.  
(KOMI A.S.S.R.—PUBLIC HEALTH, RURAL)

SHUMAKHER, R.E. (selo Ust'kulom)

Reorganizing the rural public health network. Sov. zdrav. 21 no.6:  
25-29 '62. (MIRA 15:5)

1. Glavnyy vrach Ust'kulomskogo rayona Komi ASSR.  
(PUBLIC HEALTH, RURAL)

SHUMAKHER, S. H. O.

10  
"Lubricant for metal die pressing." D. A. Drapkin, S. O.  
Shumakher, I. G. Matveev, B. S. Pankova, A. D. Park-  
homovskaya, I. N. Kalugina, and N. I. Deroshina. U.S.  
S.R. 105,249, Mar. 28, 1957. The lubricant, called prepn.  
"P-18," is a tech. mixt. of isomers of tetraisopropylid-  
phenylmethane? M. Rosen

by jmb aony

ALEKSEYEV, M.D.; PARKHOMOVSKAYA, A.D.; SHUMAKHER, S.O.

Using seamless cans made from lacquered iron plate for the canning  
of fish. Kons. i ov. prom. 13 no.4:3-6 Ap '58. (MIRA 11:4)

1. Baltiyskiy rybokonservnyy kombinat (for Alekseyev). 2. Vsesoyuznyy  
nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy  
promyshlennosti (for Parkhomovskiy i Shumakher).  
(Containers) (Fish, Canned)

MATKARIMOV, M.T., assistant; SHUMAKHER, Ya.A., vrach

Biliary calculi in the vermiform appendix in acute appendicitis.  
Zdrav.Kazakh. 17 no.6:49-50 '57. (MIRA 12:6)

1. Iz kafedry gosspital'noy khirurgii Kazakhskogo gosudar-  
stvennogo meditsinskogo instituta im. V.M.Molotova.  
(CALCULI, BILIARY) (APPENDICITIS)

SHUMAKHER, Yu.

Improving the organization forms of waste product utilization.  
Mias.ind.SSSR 33 no.2:37-39 '62. (MIRA 15:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy  
promyshlennosti.  
(Meat industry-By-products)

5400...  
KALITA, L., inzh.; SHUMAKHER, Yu., inzh.

Determining prospective number of workers and funds for their  
wages on the basis of consolidated time norms. Mias. ind. SSSR  
29 no.1:40-42 '58. (MIRA 11:3)  
(Meat industry--Production standards) (Wages)

GORODETSKIY, S.Ye., kand.ekon.nauk; LEVINA, L.I., starshiy nauchnyy  
sotrudnik; MITUSOVA, N.M., starshiy nauchnyy sotrudnik; KALITA,  
L.A., mladshiy nauchnyy sotrudnik; MIKHAIL'CHI, Yu.M., mladshiy  
nauchnyy sotrudnik; SHUMAKHER, Yu.Sh., mladshiy nauchnyy sotrudnik

Determining the extent of mechanization in the standards of  
manual labor governing the enterprises of the meat industry.  
Trudy VNIIMP no.9:158-164 '59. (MIRA 13:8)  
(Meat industry--Equipment and supplies)

SHUMAKHER, Yu., inzh.-ekonomist

Ways of reducing expenditures for the transportation of live-  
stock. Mias.ind.SSSR 30 no.2:29-31 '59. (MIRA 13:4)  
(Cattle--Transportation)

SHUMAKHER, Yu. Sh

Planning the extent of mechanization in the enterprises of the meat industry. Mias.ind.SSSR 31 no.3:43-45 '60. (MIRA 13:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promyshlennosti.

(Meat industry--Equipment and supplies)

KALITA, I.A., mladshiy nauchnyy sotrudnik; SHUMAKHER, Yu.Sh., mladshiy  
nauchnyy sotrudnik

Methods of planning the number of workers and their salary funds  
in accordance with the enlarged time rates. Trudy VNIIMP no.9:  
165-173 '69. (MIRA 13:8)  
(Meat industry) (Wages and labor productivity)

SHUMAKHER, Yu.

Direct sale of cattle by collective farms to meat combines.  
Mias.ind.SSSR 31 no.5:33-34 '60. (MIRA 13:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy  
promyshlennosti.

(Cattle trade)

SHUMAKHER, Yu.

Further development of feed production. Mias. ind. SSSR 32  
no.4:38 '61. (MIRA 14:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy  
promyshlennosti.

(Feeds)

SHUMAKOV, A.; SHIROKOV, V. .

The spring of people's initiative. Sov.profsoiuzy 6 no.16:60-  
62 N '58. (MIRA 12:2)

(Moscow--Textile workers)

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